## MAGICICADA SEPTEMDECIM LINN., BROOD XI, IN CONNECTICUT (HEMIPTERA: CICADIDAE)

## BY J. A. MANTER

Storrs, Connecticut

Brood XI of the periodical cicada made its scheduled appearance above ground during June 1954 in Connecticut. Only broods II and XI of this cicada occur in Connecticut. Brood XI in the past has been reported from scattered areas of Connecticut, Massachusetts, and Rhode Island but with only scanty records in recent years. Mr. George Dimmock observed the species in Suffield, Connecticut, in 1869 but could not find any 51 years later while visiting the same locality. The Hartford Courant, June 6, 1903, printed a letter from a correspondent describing the reappearance of "locusts" in a forest where "vast numbers" were seen in 1886 near the town of Willington. He wrote "The forest seems alive with this wonderful insect." A few local residents of the region recall hearing the cicadas in 1920, but entomologists apparently did not know of this colony and had no records of the Suffield colony since 1869.

In Massachusetts and Rhode Island Brood XI has apparently disappeared forever. Dr. Dow writes in the Bulletin of the New England Museum of Natural History, April, 1937, "though Dr. C. W. Johnson (1920) visited the locality in Rhode Island from which it was reported by Prof. A. S. Packard in 1903, he failed to discover any evidence that the cicadas had emerged." In the July number of the Bulletin, Dr. Dow reported, "The three localities in Rhode Island which had been recorded by Professor Packard in 1903 were visited by Dr. C. H. Blake and the writer on June 12, 1937. We failed to hear any cicadas or find any trace of them, and were likewise disappointed on the following day, in Suffield, Connecticut, though a map drawn by Mr. Dimmock guided us to the exact site of the former colony." From these unsuccessful attempts

to locate colonies it seemed probable that brood XI had become extinct.

On June 16, 1937, Dr. W. E. Britton informed Dr. Dow that the writer had reported the emergence of the periodical cicada in East Willington, Connecticut. Dr. Dow visited the colony with the writer on June 20, and reported his observations in the Bulletin, July, 1937. The writer prepared a short article for the 37th Report of the Connecticut State Entomologist, Bul. 408, May, 1938.

From the records available it seemed probable that the East Willington colony was the last in existence of brood XI. So it was with great interest that I made several visits in 1954 to the site of the 1937 colony on the farm of Mrs. Mary Blahusiak. The area has remained in pasture and there appears to have been no great change in conditions. although it has been kept partially free of brush by the feeding of the pastured animals.

The first cicadas were found on June 10, 1954, in the same pasture area as observed in 1937. Several later visits were made until the cicadas disappeared. At no time did their numbers approach those of 1937. From casual observations it seems that the colony has been greatly reduced in individuals, although it extended over about the same area as in 1937.

During a visit later in the summer no evidence of egg laying or of subsequent wilting of twigs was found. This was quite surprising since the injured twigs caused by egg punctures were so very conspicuous in 1937. These observations lead to the conclusion that brood XI is approaching extinction and one wonders how many more times this remarkable species will make its reappearance in East Willington, Connecticut.